

Date: Mon, 8 Nov 93 00:35:25 PST
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #1320
To: Info-Hams

Info-Hams Digest Mon, 8 Nov 93 Volume 93 : Issue 1320

Today's Topics:

ARRL files to ftp..???
BAUD VS BAUDS
characteristic impedance
Fun with Radio Shack
Neat Feature on New Motorola Commercial Ha
Neat Feature on New Motorola Commercial Handheld
RACES Bulletin #299
Radio Shack HTs (4 msgs)
rec.radio.amateur.misc Frequently Asked Questions (Part 1 of 3)
sca adapter
Stereo Advice Wanted Please
Used Radio prices

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Sun, 7 Nov 1993 03:44:21 GMT
From: sdd.hp.com!math.ohio-state.edu!howland.reston.ans.net!noc.near.net!lynx!
chaos.dac!wylz@network.ucsd.edu
Subject: ARRL files to ftp..???
To: info-hams@ucsd.edu

In article <CG18Ko.A7r@inf.utfsm.cl> ce2usm@inf.utfsm.cl (Circulo de Radio
Aficiionados UTFSM) writes:

Newsgroups: rec.radio.amateur.misc
Path: lynx!noc.near.net!howland.reston.ans.net!spool.mu.edu!darwin.sura.net!

uchdcc!tunga!ce2usm

From: ce2usm@inf.utfsm.cl (Circulo de Radio Aficiionados UTFSM)
Organization: Depto. de Informatica, UTFSM.
X-Newsreader: TIN [version 1.2 PL2]
Date: Fri, 5 Nov 1993 18:51:53 GMT
Lines: 17

'lo all!

I was snopping at arrl.org and I saw a lot of progs that I want to come to my account... but the problem is that ARRL's BBS doesn't support (does it?) ftp.... and a call from Chile to USA is too expensive to do.. :)

I'm looking for a good ftp site where U can login as anonymous (or guest or anything U like..) and get all teh progs U want..... If somebody have a clue to do it please let me know.... please don't e-mail to this account but to rrodrigu@loa.disca.utfsm.cl... and please don't post replys on netnews 'cause I haven't an easy way to acces news... :(

Thanks in advance for any information.....

ROD.

CE6NUG

rrodrigu@loa.disca.utfsm.cl

ce6nug@ce6fyt.radio.cl

You can anonymously log into world.std.com (192.74.137.5) and change directory to: /pub/hamradio/arrl/Server-files

where you will find ALL of the ARRL files from their info server.

I receive updates directly from them, and when I do, I turn right around and place those updates onto the World system.

While on the World, feel free to browse the rest of the hamradio area.

73,
Scott

--

```
=====
| Scott Ehrlich           Internet: wy1z@neu.edu           |
| Amateur Radio: wy1z      AX.25: wy1z@wa1phy.#ema.ma.usa.na |
|-----|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| the World - world.std.com /pub/hamradio                       |
=====
```

Date: Fri, 05 Nov 93 16:02:32 GMT
From: dog.ee.lbl.gov!agate!howland.reston.ans.net!europa.eng.gtefsd.com!
library.ucla.edu!csulb.edu!csus.edu!netcom.com!netcomsv!bongo!skyld!
jangus@network.ucsd.edu
Subject: BAUD VS BAUDS
To: info-hams@ucsd.edu

In article <msattlerCG0B3C.HCH@netcom.com> msattler@netcom.com writes:

> I've been trying to stay out of this discussion as best I could,
> but in studying for my No-Code Technician test next week I came
> across questions T1C03-T1C07 in Gordon West's Radio Shack prep
> book: he uses bauds again and again.
>
> My two cents worth.

What do you expect from a buffoon that drives around in a wanna-be
ambulance pretending to be hip?

This is like most pop stars, just because they are well known doesn't
mean they know shit from shinola.

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA	"It is difficult to imagine our
Internet: jangus@skyld.tele.com	universe run by a single omni-
US Mail: PO Box 4425 Carson, CA 90749	potent god. I see it more as a
Phone: 1 (310) 324-6080	badly run corporation."

Date: 8 Nov 93 02:04:04 GMT
From: ogicse!emory!kd4nc!ke4zv!gary@network.ucsd.edu
Subject: characteristic impedance
To: info-hams@ucsd.edu

In article <CG17IA.Hp@hpcvsnz.cv.hp.com> charlier@lsid.hp.com (Charlie Panek)
writes:

>
> The impedance at the far end corresponding to minimum return loss is
> entirely a function of the electrical length of the line.

Umm, too true. When I tried it in the shop, I grabbed a random hunk

of RG-59, and the pot gave me a dip at 75 ohms. I should have tried a different frequency, or a different cable. Your explanation shows the error of my thinking, and Roy shows a simple resistance bridge and variable frequency approach that *will* work.

Gary

--

Gary Coffman KE4ZV	"If 10% is good enough	gatech!wa4mei!ke4zv!gary
Destructive Testing Systems	for Jesus, it's good	uunet!rsiatl!ke4zv!gary
534 Shannon Way	enough for Uncle Sam."	emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244	-Ray Stevens	

Date: Fri, 5 Nov 1993 23:12:54 GMT
From: mvb.saic.com!unogate!news.service.uci.edu!usc!howland.reston.ans.net!
darwin.sura.net!gatekeeper.es.dupont.com!esds01.es.dupont.com!
COLLINST%esvx19.es.dupont.com@network.ucsd.edu
Subject: Fun with Radio Shack
To: info-hams@ucsd.edu

In article <gregCFz6KF.DGz@netcom.com>, greg@netcom.com (Greg Bullough) writes:

>Went into Radio Shack the other day, to see if their discone antenna looked
>like a worth-while investment as a broadband TX/RX antenna. They didn't
>have one in stock.

>

>In any case, I saw the '94 catalog and asked for one. "That'll be three
>dollars" says the sales droid. "What?" says I, "you're charging for them?"
>"We are this year," he replies. Seeing coupons for about eight bucks in
>the front, I fork over the cash.

>

I would not pay the \$3.00. Instead I spent .29 on a letter of complaint to RS at Fort Worth, TX and about 3 weeks later what came in the mail. A RS catalog and a letter of apology for the "shabby treatment" I received in the store. It was sort of funny, I never mentioned anything about shabby treatment at all. Just that after purchasing thousands of dollars of parts and computer stuff I refused to pay \$3 for their catalog.

73, Tom WI3P collinst@esvax.dnet.dupont.com or collinst@world.std.com

***** The comments, opinions, belief, sentiment, views & scribblings ****
***** above this signature are mine, and mine alone. They do not ****
***** reflect the E.I. DuPont de Nemours Co., Inc., its subsidiaries, ****
***** partners, employees or shareholders. ****

Date: Sun, 7 Nov 1993 18:47:43 GMT
From: elroy.jpl.nasa.gov!grian!morris@decwrl.dec.com
Subject: Neat Feature on New Motorola Commercial Ha
To: info-hams@ucsd.edu

burke_br@adcae1.comm.mot.com (Bruce Burke Sp App) writes:

>In article AA24971@mbs.telesys.utexas.edu, miles@mbs.telesys.utexas.EDU (Miles Abernathy) writes:

>}Here's a neat feature of the new Motorola Visar handheld,

>}

>}The Visar has an LCD channel display mounted on top at a 45-degree angle,
>}so it is visible from above (if the radio is in your shirt pocket) or from
>}the front (if you have it in your hand). Of course, that means that the
>}display must be upside down from one or the other position.

>}

>}The neat feature is an invert button. Press it and the characters in the
>}display electronically invert! No need to read upside-down numbers!

>}

>}Hooray for Yankee ingenuity!

>}

>The MT1000 radios also would do that.

>Bruce, WB4YUC

There was a left-right switch on a late 1960's police radar gun so that the speed display could be read in the rear view mirror if the gun was mounted in the back window. I remeber it had Numitron displays.

--

Mike Morris WA6ILQ | This space intentionally left blank.
PO Box 1130 |
Arcadia, CA. 91077 | All opinions must be my own since nobody pays
818-447-7052 evenings | me enough to be their mouthpiece...

Date: 8 Nov 1993 05:53:02 GMT
From: nothing.ucsd.edu!brian@network.ucsd.edu
Subject: Neat Feature on New Motorola Commercial Handheld
To: info-hams@ucsd.edu

In article <jfhCFzM1F.IuM@netcom.com> jfh@netcom.com (Jack Hamilton) writes:
>When are the domestic thinkers at Motorola going to start paying attention
>to the ham market? (Taking out threatening ads in QST doesn't count.)

Probably about the time that hams start buying significant quantities of \$1200+ walkies and \$2500+ mobiles.

Don't hold your breath.

- Brian

Date: 8 Nov 93 06:35:02 GMT
From: news-mail-gateway@ucsd.edu
Subject: RACES Bulletin #299
To: info-hams@ucsd.edu

Bid : \$RACESBUL.299
Subject : RB.299 Strike Teams 1/2

TO: ALL EMERGENCY MANAGEMENT AGENCIES VIA AMATEUR RADIO
INFO: ALL RACES OPERATORS IN CA (ALLCA: OFFICIAL)
ALL AMATEURS U.S. (@ USA: INFORMATION)
FROM: CA STATE OFFICE OF EMERGENCY SERVICES (W6SIG @ WA6NWE.CA)
2800 Meadowview Rd., Sacramento, CA 95832 (916)262-1600
Landline BBS open to all: (916) 262-1657
RACESBUL.299 DATE: Nov 8, 1993
SUBJECT: OPS - STRIKE TEAMS - Part 1/2

Adapted from an article by Ted Benson, WA6BEJ, Deputy RACES Radio Officer/Mobile Operations, San Diego County RACES as published in TAC ONE, vol. 1, issue 2.

The Strike Team, What it is, and what it isn't.

In its simplest form, the Strike Team is a group of specialists, ready to go anywhere on short notice, and able to bring everything they need along with them. It is to provide short-term support until a given situation can be evaluated, and further resources called in. Our Strike Team is designed to operate for 72 hours without outside support. By the end of that time, the incident will either be resolved (the record is currently one hour), or further support will have been brought in. This is an important part of the Strike Team concept, and the most often misunderstood.

The resources of a Strike Team could easily be exhausted if it was called in to every incident and expected to remain until the entire incident was over. Instead, its function is to provide a bridge between the initial incident and the arrival of the larger, but slower to mobilize resources. Once further resources have arrived, the Strike Team transitions itself out of the picture - ready to respond to another call. This technique has been developed to a science by the California Department of

Forestry (CDF) which fields Strike Teams all over the state. It was their example, in part, that was used to develop our Strike Team.

(Concluded in part 2)

EOF

RACES Bulletins are archived on the Internet at ucsd.edu in hamradio/races and can be retrieved using FTP.

Date: Fri, 5 Nov 93 15:40:11 EST
From: dog.ee.lbl.gov!agate!howland.reston.ans.net!noc.near.net!news.delphi.com!usenet@network.ucsd.edu
Subject: Radio Shack HTs
To: info-hams@ucsd.edu

> Actually most HT's these days include all that standard. Why spend \$250 for
> a 2m mono band RS HT and then another \$250 (?) for a monband 440 RS HT when
> for way less than \$500 you can get quality dual banders? My FT530 has no
> optional extras and the total price was \$429. All of those features you
> mention plus a hell of a lot more are included.
>
> Anyone in the market for a monoband HT should really consider if one band
> is worth just a few bucks less than 2 bands. Recently I even saw an IC24AT
> (dual band ICOM) in the .swap newsgroup for \$275.

The problem with dual-band HTs is they don't have very good rejection of RF signals outside the intended frequency. I've run HTX-202 to HTX-202 simplex in downtown Louisville during the HamFest without any intermod problems. Unfortunately I can't say the same about the fancy dual banders. During peak times of the day, dual banders in the downtown area are basically expensive noise makers. :-(Of course some are better than others, but all have intermod problems.

-- Greg KE4DPX

Date: 8 Nov 93 04:13:06 GMT
From: ogicse!uwm.edu!math.ohio-state.edu!howland.reston.ans.net!noc.near.net!news.delphi.com!usenet@network.ucsd.edu
Subject: Radio Shack HTs
To: info-hams@ucsd.edu

Bob Levine <levine@mc.com> writes:

> Yes, Greg, maybe. But you are also a very new ham and instead of hearing

> about "them fancy dual-banders", I am looking for real quantitative data
> from a lab. Not Rat Shack owners justifying their purchases as it seems
> is the case lately. Besides, all the Rat Shack owners ever want is "mods"
> to hear outside the ham bands anyway! What makes you think Korean HTs
> are any better than American (where?) or Japanese HTs?

I'm not attempting to justify the purchase of the HTX-202, and neither am I saying the HTX-202 is better or worse than any other HT. For one thing, "better" is a qualitative measurement based primarily on personal tastes. I'm not looking for mods to the HTX-202 either. As I've said previously, if I wanted a to receive out of band, I'd buy a scanner -- which is exactly what I did. While this is obviously my personal preference, I wanted an HT that operated exclusively in the 2 meter amateur band and that had DTMF encode and decode, CTCSS encode and decode, and that was fairly easy to operate on the highway.

-- Greg KE4DPX

Date: 5 Nov 1993 20:59:23 GMT
From: dog.ee.lbl.gov!agate!howland.reston.ans.net!noc.near.net!jericho.mc.com!
fugu!levine@network.ucsd.edu
Subject: Radio Shack HTs
To: info-hams@ucsd.edu

In article GREGL@delphi.com, Greg Law <GREGL@delphi.com> () writes:

-->> Actually most HT's these days include all that standard. Why spend \$250 for
-->> a 2m mono band RS HT and then another \$250 (?) for a monband 440 RS HT when
-->> for way less that \$500 you can get quality dual banders? My FT530 has no
-->> optional extras and the total price was \$429. All of those features you
-->> mention plus a hell of a lot more are included.

-->>

-->> Anyone in the market for a monoband HT should really consider if one band
-->> is worth just a few bucks less than 2 bands. Recently I even saw an IC24AT
-->> (dual band ICOM) in the .swap newsgroup for \$275.

-->

-->The problem with dual-band HTs is they don't have very good rejection of
-->RF signals outside the intended frequency. I've run HTX-202 to HTX-202 simplex
-->in downtown Louisville during the HamFest without any intermod problems.
-->Unfortunately I can't say the same about the fancy dual banders. During peak
-->times of the day, dual banders in the downtown area are basically expensive
-->noise makers. :-(Of course some are better than others, but all have intermod
-->problems.

-->

--> -- Greg KE4DPX

Yes, Greg, maybe. But you are also a very new ham and instead of hearing

about "them fancy dual-banders", I am looking for real quantitative data from a lab. Not Rat Shack owners justifying their purchases as it seems is the case lately. Besides, all the Rat Shack owners ever want is "mods" to hear outside the ham bands anyway! What makes you think Korean HTs are any better than American (where?) or Japanese HTs?

Date: Fri, 5 Nov 1993 22:21:40 GMT
From: munnari.oz.au!spool.mu.edu!sdd.hp.com!hpscit.sc.hp.com!cupnews0.cup.hp.com!news1.boi.hp.com!riyadth@network.ucsd.edu
Subject: Radio Shack HTs
To: info-hams@ucsd.edu

In article <2beerb\$2m1@jericho.mc.com> levine@mc.com writes:
> Yes, Greg, maybe. But you are also a very new ham and instead of hearing
> about "them fancy dual-banders", I am looking for real quantitative data
> from a lab. Not Rat Shack owners justifying their purchases as it seems
> is the case lately. Besides, all the Rat Shack owners ever want is "mods"
> to hear outside the ham bands anyway! What makes you think Korean HTs
> are any better than American (where?) or Japanese HTs?

Well, I'm also a very new ham (who doesn't own a radio yet :-), but I do have some lab data, courtesy of QST (not responsible for typographical errors :-)

2m comparisons, from QST (Oct '92)
As measured in the ARRL Lab

RS Alinco Icom Yaesu Kenwood Standard
HTX-202 DJ-F1T IC-P2AT FT-411E TH-225A C168A

RX:
Sensitivity: -122.5 -123 -124 -121.5 -125.5 -123
(dBm)

Two-tone,
third-order
dynamic range: 70.5 62 65 43.5 67.5 74
(dB, 20kHz off)

Adjacent-channel
rejection: 72.5 58 70 63 60.5 57
(dB, 20kHz off)

TX:
Spurious signal

and harmonic
suppression: >70dB >60dB >60dB >60dB >60dB >60dB

Dual band comparisons, from QST (Jun '91)
As measured in the ARRL Lab

Alinco Icom Yaesu Kenwood Standard
DJ-560T IC-32AT FT-470 TH-77A C228A

RX (2m band):
Sensitivity: -122 -123 -124 -123 -123
(dBm)

Two-tone,
third-order
dynamic range: 53 58 53 60 69
(dB, 20kHz off)

Adjacent-channel
rejection: 57 62 65 67 62
(dB, 20kHz off)

TX:
Spurious signal
and harmonic
suppression: >60dB >60dB >60dB >60dB >60dB

It seems to me that these 'Rat Shack' owners are just trying to
spread the good word, and the owners of "them fancy dual-banders"
may be trying to justify their purchases.

And not all Radio Shack owners are looking for 'mods', either. It
seems like there are those who want a lot of features for a little
price, but they don't realize that a good radio is the best feature,
and that the extra stuff can reduce the 'goodness'. It makes perfect
sense to me that a tightly filtered front end would produce the
cleanest RF (in and out).

-Riyadth Al-Kazily
riyadth@boi.hp.com

--
{ Riyadth Al-Kazily KB7YWE DoD #295 '83 BMW R65 '77 Volvo 242DL }
{ riyadth@boi.hp.com | When am i going to have time to use all this }

{ (208) 396-4987 | stuff I'm collecting? More important, how can }
{ Boise, Idaho | I get more stuff? Amiga 500+ (+ stuff, that is) }

Date: Sun, 7 Nov 1993 21:22:55 GMT
From: amd!amdahl!thunder!ikluft@decwrl.dec.com
Subject: rec.radio.amateur.misc Frequently Asked Questions (Part 1 of 3)
To: info-hams@ucsd.edu

Posted-By: auto-faq 3.0
Archive-name: radio/ham-radio/faq/part1
Revision: 3.0 1993/11/07 18:38:38

Rec.radio.amateur.misc Frequently Asked Questions
Part 1 - Introduction to the FAQ and Amateur Radio

This is a regular posting of frequently-asked questions (FAQ) about Amateur Radio, also known as Ham Radio. It is intended to summarize some common questions on the rec.radio.amateur.misc newsgroup and Info-Hams mail list as well as to help beginners get started.

Please provide a copy of the FAQ to any new or soon-to-be Hams you know.

Regular FAQ postings can help save network bandwidth and maintain a good signal-to-noise ratio in the newsgroup. However, they can't do it alone - you, the reader, have to use them. If you are a new user, please print and review the FAQ articles and look at the instructions in the news.announce.newusers newsgroup before posting any articles. If you are an experienced user, please help by refraining from answering frequently-asked questions on the newsgroup if they are already answered by the FAQ articles. Instead, send e-mail to the user who asked the question. (It will be helpful if you include the part of the FAQ that answers their question, but not the whole thing.)

The FAQ cannot always prevent people from posting repetitive questions. But even if hundreds of questions get posted, it saves you from having to answer them hundreds of times. Also, a friendly pointer to the FAQ in your first answer can help that person refer to the FAQ in the future. That is when we can begin to get a real savings of network bandwidth.

To reduce the size of each article, the FAQ information is posted in 3 parts:
Part 1 - Introduction to the FAQ and Amateur Radio
Part 2 - Amateur Radio Organizations, Services, and Information Sources
Part 3 - Amateur Radio Advanced and Technical Questions

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- ** Where can I find Ham Radio information with a computer? (11/92)
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- ** Are there Dialup News services or BBSs for Amateur Radio? (4/92)
- ** Where can I find VE sessions in my local area? (9/93)

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- ** What is the standard phonetic alphabet? (new 9/93)
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- ** Where can I learn more about Amateur Radio if I live outside the US? (9/93)
- ** How can I get a "reciprocal license" if I am a licensed ham from another country or if I am a FCC licensed ham who wants to operate in another country (on vacation)? (9/93)
- ** My apartment or housing complex does not allow outdoor antennas, now what do I do? (9/93)
- ** I got TVI...HELP!!! (9/93)
- ** Did you know that you can get college credit for being a ham? (pre-4/92)
- ** On what frequencies do JPL and GSFC retransmit the shuttle audio? (10/92)
- ** Can I take my HT on an airplane and operate it if I get the permission of the captain? (4/92)
- ** How do I modify my current Amateur license? (9/93)
- ** I'm confused about XXX, should I ask the FCC? (9/93)
- ** Is there any information on antique radios? (pre-4/92)
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- ** What do I need to get started in packet radio? (9/93)
- ** What do I need to get started in satellite communications? (9/93)
- ** What is available to get started in ATV, SSTV and WEFAX? (9/93)
- ** What are these contests I sometimes hear, and how do I participate? (9/93)

--Rec.radio.amateur.misc Frequently-asked Questions-----Part 1--

** Introduction to the FAQ

* How to Contribute to the FAQ Articles

We accept suggestions from the Amateur Radio community. Please consider that all new contributions need to be SHORT and concise in order to be included. If a contribution is too long, the FAQ editors can help you find a more appropriate FTP archive or mail server for your article.

We always accept corrections. Please allow some time (often not the next issue of the FAQ) because the FAQ maintainers do this as volunteers so each must give higher priority to their employers.

Send correspondence to `hamradio-faq@amdahl.com` so that it will reach all the FAQ coordinators: (listed in alphabetical order)

Ed Hare	KA1CV	ehare@arrl.org	(Newington, CT, USA)
Jack GF Hill	W4PPT	root@jackatak.raider.net	(Brentwood, TN, USA)
Ian Klufft	KD6EUI	iklufft@uts.amdahl.com	(Santa Clara, CA, USA)
Michael Larish	KD6CTZ	nomad@ecst.csuchico.edu	(Chico, CA, USA)
Paul Schleck	KD3FU	pschleck@unomaha.edu	(Omaha, NE, USA)
Chris Swartout	N6WCP	cas30@uts.amdahl.com	(San Jose, CA, USA)
Steve Watt	KD6GGD	steve@wattres.sj.ca.us	(San Jose, CA, USA)
Rosalie White	WA1STO	rwhite@arrl.org	(Newington, CT, USA)
Derek Wills	AA5BT	oo7@astro.as.utexas.edu	(Austin, TX, USA)

* Acknowledgements

All questions listed as modified "pre-4/92" are entirely Diana Carlson KC1SP's work or her editing of a contributor's work. Diana established this FAQ and credit is due to her for founding this project.

Thanks to Devon Bowen KA2NRC for accepting this FAQ in e-mail every month to keep the FTP archive at `ftp.cs.buffalo.edu` up-to-date.

* Notes on "Netiquette"

The `rec.radio.amateur.misc` newsgroup and Info-Hams mail list have a large daily volume of traffic. They can operate more efficiently if the following netiquette guidelines are followed. Please take them seriously.

- * If you are new to UseNet, the introductory articles in `news.announce.newusers` are required reading. Go to that newsgroup now. Definitely, read the instructions there before posting anything. Other `rec.radio.amateur.*` readers will appreciate it!
- * Pick the right newsgroup. Use only the most specific newsgroup for your subject. For example, a question about a homebrew antenna only needs to be posted to `rec.radio.amateur.antenna`. Also, don't post to `rec.radio.amateur.misc` when the subject can go in another `rec.radio.amateur.*` newsgroup. So, when there is a more specific newsgroup, that's the one you want.
- * When posting a followup article, ALWAYS try to minimize the number of lines of quoted material from the original article.
- * As a general rule when you try to determine whether to reply to someone by e-mail or with a followup article, remember to "praise in public, criticize in private." It's OK to disagree technically but be careful not to attack the person with whom you disagree. Also, be careful with your use of the word "you" when posting a follow-up article. Many unnecessary flame wars have started that way.

- * Use a descriptive subject. For example, a message subject of "Ham Radio" tells the reader NOTHING about the contents of your article since the whole newsgroup is about Ham Radio. Other examples of subjects which are so broad that they become useless could include, "Help," "A Question," "Antennas," or "Frequencies." Maybe "Books on Antennas?" or "Where can I find Repeater Frequencies?" would be better, for example. Remember, in a busy newsgroup a lot of users decide which articles to read from the subject line alone. If you post, don't deprive yourself of an audience!
- * Before answering a question, check if the FAQ adequately answers it or if someone else already answered it. If you have more to add, make sure to reference either the FAQ or the related articles.
- * If a user posts a question which is directly answered by the FAQ, there is no need to post an answer - the information is already available on the newsgroup. Instead, just send an e-mail message which politely explains where to find the FAQ. They will probably appreciate it if you include the answer to their question. (Don't send a "nastygram" - that would just discourage future participation.)
- * Pay attention to the size of your audience - use the "Distribution:" header. If you leave it blank, your message will go to every civilized country in the world and occupy disk space in all news systems in all those places. If that's what you intend, that's fine but make sure your article is relevant outside your country. (In particular, Hams should already know there is more to the world than just their own country.)
- * If you have an item for sale, please limit the distribution area so that, for example, an article about a radio for sale in New Jersey won't get to California or Europe. If you wish, you may cross-post your for-sale article to rec.radio.swap.
- * Software sources should be posted to either alt.sources, comp.sources.misc, or comp.sources.* for a specific machine type. Software binaries should be posted to the appropriate subgroup of comp.binaries.

** What is Amateur Radio?

Amateur Radio is a non-commercial radio communication service whose primary aims are public service, technical training and experimentation, and communication between private persons. Amateur Radio operators are commonly called hams. Hams often communicate with each other recreationally but also provide communications for others at public events or in times of emergency or disaster.

** Who can become a ham?

The answer to this question differs in every country.

The answer for the USA is listed below. If your country has a newsgroup specifically for it (i.e. UK, Australia, Germany)

the most accurate answers can be found there. See Part 2 for the list of region-specific newsgroups.

If that doesn't help, the American Radio Relay League (ARRL) may be able to help because they communicate with similar organizations in other countries, probably including yours. They can be reached by electronic mail or surface mail (see Part 2.)

In the USA, anyone who is not a representative of a foreign government can be an Amateur Radio operator. There are tests that you must pass to get a license, however the tests are not insurmountable. On that general level, the requirements are probably similar in almost every country.

For more information on becoming a Ham in the USA, the ARRL has a toll-free number where you can request information: 1-800-32-NEW-HAM (don't worry about the number being one digit too long - the phone system ignores it.) Other information can also be obtained from the ARRL e-mail information server in the file called PROSPECT. Details on the server are in Part 2.

** Where can I locate information and books on Amateur Radio? Your local Radio Shack sells some ham radios and Amateur Radio license books. Books can also be obtained through the mail from ham radio organizations, such as ARRL in Newington, CT (203-666-1541) and W5YI in Dallas, TX (1-800-669-9594). There may be one or two ham radio stores in the local area (ie, within 50 miles). Try looking in the Yellow Pages under Radio Communications.

For the Novice license, get a Novice License manual, plus 5-word-per-minute Morse code tapes, costing around \$25. For the Technician license, get a combined Novice and Technician License manual, and an FCC Rules manual, costing around \$32. The FCC Rules manual is a good idea for Novice also, but not necessary, since the Novice License manual contains all the FCC Rules that are required for the Novice License.

The ARRL Education Activities Department has several programs to help amateurs (or prospective amateurs) to get started. Ask for a "New prospect package" available free of charge, from ARRL HQ, Educational Activities Department, 225 Main St, Newington, CT 06111.

Information on Ham Radio can also be obtained with your computer. Part 2 of this FAQ contains a significant amount of material on that subject.

** How much does it cost?

To take the tests for any class of amateur radio license, there is a small charge (around \$5-\$6 currently) to cover copying costs and running the testing sessions. (Due to changes in 1993, Novice tests are under same procedures as the others.) The cost of a radio is really dependent on what you want to do. You can make your own radio and antenna for under \$150. You can buy a used single-band radio for \$150-\$300. Or you can buy a new multi-band multi-mode radio with all the doodads for \$300-\$3000. I'd suggest you learn more about ham radio, talk to local hams, find out what you want to do with ham radio first.

** Where can I take the tests?

The Novice tests Used to be given by any two qualified hams of General class license or above. Now all the license tests are given by three qualified Volunteer Examiners (VEs) who volunteer their time.

To locate an ARRL testing session in your area, you can contact ARRL at 203-666-1541 x282.

See also the section "Where can I find VE sessions in my local area?" in Part 2 because more information is available via UseNet.

** What are the tests like?

First off, come prepared to VE sessions. Bring: TWO forms of ID, one of which has a picture on it; a calculator (if necessary); a pen and two pencils; the applicable examination fee (around \$5-\$6 for 1993); the original AND a copy of your current Amateur Radio license (if you have one); the original AND a copy of any CSCEs for tests you've already passed (if you have any).

Each of the written tests (Novice, Technician, General, Advanced, and Extra) are generally a multiple choice test of approximately one-tenth of the question pool. For example, if the question pool is approximately 300 questions, then the test will be a 30-question test. You need to get 75% correct to pass. Note that they truncate to determine the correct number of questions. That means for a 30 question test, you need to get 22 right, which is actually only 73.3%.

Once you've paid the small fee for Technician-Extra tests, it costs no extra to take another test, so I'd suggest you keep taking the next more advanced test until you fail. If you pass the written but not the Morse code (or vice versa) for a specific class license, you have up to one year to take the other test before you would have to retake the written test again. Note that some VEs will not allow you to take the written test unless you've first taken the Morse code test.

The Morse code test is a receiving test only. The test run 5 to 7

minutes. After the test, you are given a 10-question multiple-choice or fill-in-the-blank test. Passing grade is 7 or more. If you fail the 10-question test, the examiner team will examine your copy sheet to see if you have 1 minute of solid copy with no errors. For 5 wpm, that's 25 characters, for 13 wpm, that's 65 characters, for 20 wpm, that's 100 characters. If they can find 1 minute solid copy, you've still passed.

Hints on Morse code tests: Generally, it will be a standard QSO (conversation), and it MUST contain at least one of each of the following:

26 letters A-Z, 10 numbers 0-9, comma (,), period (.), slant or slash (/), question mark (?), double dash prosign (BT), end of message prosign (AR), end of contact prosign (SK).

The letters count as one character, all others count as two characters. There are a couple other prosigns which are worth knowing, but will not be on the test, like "I'm done talking, next" is K, "I'm done talking, back to you" is KN, "Please wait" is AS.

** What can I do with a ham radio license?

There are so many things, it's a difficult question to answer, but here's some ideas:

- * Talk to people in foreign countries.
- * Talk to people (both local and far away) on your drive to work.
- * Help in emergencies by providing communications.
- * Provide communications in parades or walkathons.
- * Help other people become hams.
- * Hook your computer to your radio and communicate by computers.
- * Collect QSL cards (cards from other hams) from all over the United States and foreign countries and receive awards.
- * Participate in contests or Field Day events.
- * Provide radio services to your local Civil Defense organization thru ARES (Amateur Radio Emergency Service) or RACES (Radio Amateur Civil Emergency Service).
- * Aid members of the US military by joining MARS (Military Affiliate Radio System).
- * Participate in transmitter hunt games and maybe build your own direction-finding equipment.
- * Have someone to talk to on those sleepless nights at home.
- * Receive weather pictures via satellites.
- * Build radios, antennas, learn some electronics and radio theory.
- * Talk to astronauts in space, or use the moon to bounce signals back to people on the Earth.
- * Experiment with Amateur TV (ATV), Slow-Scan TV (SSTV), or send still-frame pictures by facsimile.
- * Experiment with amateur satellite communications.

** What can't I do with an Amateur Radio license?

The most important thing you can't do is transact business of any kind over ham radio. Interference to other hams or services, as well as obscene, profane or indecent language is not tolerated and is illegal. Music and broadcasting are not allowed on ham radio. Some personal conversations may not be appropriate to Amateur Radio. Do you really want the whole world to hear about Aunt Mabel's hemorrhoids?

** I'm interested, who will help me?

There are hams who are willing to become "Elmers" (mentors, helpers) in your local area. Look around and ask local hams. Search out local radio clubs. As well, some people have volunteered to be an Elmer over the Usenet. A list of UseNet Elmers and their e-mail addresses is posted to the newsgroup monthly. If anyone wants to be an Elmer, send e-mail to
elmers-request@unomaha.edu

There is also a lot to be said for exploring on your own. Take a look around the FTP archives and e-mail servers listed in Part 2. There's so much out there on UseNet, you'll find plenty of things you're interested in.

** Should I build my own equipment or antenna?

[see also rec.radio.amateur.homebrew and rec.radio.amateur.antenna]
"Homebrewing" is a fun and educational part of ham radio. It is a thrill to build your own transmitter and put it on the air. However, building your own receiver can be quite complicated; if you don't have electronics experience, you may want to buy a receiver instead. Most homebrew transmitters are QRP (transmit very low power). That's fine for an experienced ham with a very good antenna, but a Novice ham will just get frustrated. Your first rig, therefore should NOT be a homebrew.

Antennas can be much simpler projects than the transceiver, though some types are also quite involved. Most hams build their own antennas for base station use and buy antennas for mobile (car) use. Most beginner ham books describe how to build different types of antennas. Order of difficulty, from easiest to more difficult, for some common antennas are: wire dipole, Zepp, Yagi, Quad, and Log-Periodic. Books from many sources, including ARRL and several Hams, discuss antennas in depth.

When building or even understanding antennas, it is good to know the relationship between the antenna element length and the frequency or wavelength it is designed for. An antenna performs best at multiples of $1/4$ of that wavelength, though $5/8$ wave also has beneficial qualities. The wavelength is related to the frequency with the following formula:

wavelength (in meters) = 300 / frequency (in megahertz)

You do not need a huge antenna or tower like ones you may see around your neighborhood. Large beam antennas and 40-foot towers are very expensive. As a beginner, a simple dipole antenna is perfectly adequate. As you gain experience (and money :-), you may want to invest in something bigger.

If you can afford new rigs and antennas, there are many mail order stores that advertise in ham radio magazines. If you want to buy a used rig, the best place is at a "hamfest" (ham flea market). You should take along an experienced ham, since some of the used equipment may be inoperative, overpriced or poor quality. You can also answer ads in ham magazines or posted at ham radio stores, although often, by the time you call, the equipment has already been sold.

Date: 8 Nov 93 00:51:00 GMT
From: news-mail-gateway@ucsd.edu
Subject: sca adapter
To: info-hams@ucsd.edu

I am looking for a sample schematic for a SCA adapter. Thanks.

Richard Brittigham
PO Box 5425
Hampton, VA 23667

Date: Sun, 7 Nov 93 19:28:58 GMT
From: mnemosyne.cs.du.edu!nyx10!mlovoss@uunet.uu.net
Subject: Stereo Advice Wanted Please
To: info-hams@ucsd.edu

I am looking to buy a bookshelf stereo system (CD, tuner, tape deck, amp, no turntable) costing from \$600 to \$1,000. Any recommendations about the best system in this price range that anyone might have would be greatly appreciated.

E-mail to:
mlovoss@nyx10.cs.du.edu

Date: Sat, 6 Nov 1993 04:09:24 GMT
From: pacbell.com!sjhawk2@ames.arpa
Subject: Used Radio prices
To: info-hams@ucsd.edu

I heard someone talk about a list that was posted to the
Net listing prices for used radios. I must have missed it
if anyone has a copy would they be so kind as to Email it
to me. Thankyou very much. de Steve WV6U

Date: 8 Nov 93 04:46:15 GMT
From: ogicse!uwm.edu!vixen.cso.uiuc.edu!howland.reston.ans.net!noc.near.net!
news.delphi.com!usenet@network.ucsd.edu
To: info-hams@ucsd.edu

References <931105.56411.GREGL@delphi.com>, <2beerb\$2m1@jericho.mc.com>,
<CG1I45.L2D@boi.hp.com>net
Subject : Re: Radio Shack HTs

The chart from the October 1992 issue of QST seems to confirm the
specifications printed in the HTX-202 manual. For those interested, here
are the printed specifications on Page 37 of the manual:

Spurious response attenuation: 80dB
Intermodulation attenuation: 70dB
Adjacent channel rejection (25KHz): 70dB
Modulation acceptance bandwidth: 8KHz
Hum and noise: 50dB

The only "misfeature" I've found with the HTX-202 is that its mic gain
is way low for my quiet voice -- so low that others have to crank the
volume control to hear me. On the other hand, I had the very same problem
with an older Icon W2A. To get around the problem I adjusted the deviation
of my HTX-202 so I can now be heard loud and clear without having to yell
straight into the mic.

-- Greg KE4DPX

End of Info-Hams Digest V93 #1320

